

What is claimed is

1. A driving circuit can drive an active matrix organic electro-luminescence display panel which is composed of pixels arranged in columns and rows; columns of pixels are
5 divided as a block controlled by the block control line; the driving circuit of each pixel consists of:

A writing TFT having a gate connected to a scan line and having a drain connected to a data line;

10 A switching TFT having a drain connected to the source of the writing TFT and having a gate connected to the block control line;

15 A resetting TFT having a drain connected to the source of the switching TFT and having a source connected to a supply line and a gate connected to the front scan line, wherein the gate of resetting TFT of all pixels on the first scan line is connected to a Start-Erase Line;

A storage capacitance with one end connected to the supply line and another end connected to the joint where the source of switching TFT meets the drain of resetting TFT;

20 A driving TFT whose source connected to the supply line. Its gate, the same as one end of storage capacitance is connected to the joint where the source of switching TFT and the drain of resetting TFT meet;

25 An organic electro-luminescence element with the positive electrode connected to the drain of the driving TFT and the

negative electrode grounded.

2. For the driving circuit of a first said active matrix organic electro-luminescence display in Item 1, the number of block control lines is determined by the addition of the length of data display phase of the first sub-frame and the length of data erase phase of the first sub-frame, which is divided by the data display phase of the first sub-frame.
3. Sequences of driving an AMOLED for this invention can be divided into data resetting, data writing, data displaying and data erasing with explanations in detail as follows:

Data Reset Time: Control signals from the scan line of the previous row will turn on the resetting TFT of all pixels on the scan line of the current row and electric charges inside the storage capacitance will be erased once again to ensure there is no voltage difference between both ends of storage capacitance.

Data Write Time: Control signals from the scan line of the previous row will turn off the resetting TFT of all pixels on the scan line and control signals from the scan line of the current row will turn on the writing TFT of all pixels on the scan line on, as the switching TFT of all pixels is on, data voltage signals on each data line can be inputted into the corresponding storage capacitance.

Data Display Phase: Control signals from the scan line of the previous row will turn off the resetting TFT of all pixels on

the scan line of the row and control signals from the scan line of the current row will turn off the writing TFT of all pixels on the scan line of the current row. As data voltage signals on the data line can't be inputted into the storage capacitance, such signals stored during data write in every pixel will be held, as a result, TFT driving current of each pixel will be decided by the voltage stored on both ends of storage capacitance and brightness of the organic electro-luminescence element will be generated in accordance with the current passed.

10 Data Erase Phase: Control signals from the block control line will turn off the switching TFT of all pixels in that driving block and the control signals from the scan line of the previous row will turn on the resetting TFT of all pixels on the scan line of the current row, an activated resetting TFT will remove electric charges inside the storage capacitance, which leads to no voltage difference between two ends of storage capacitance, consequently, TFT driving current of all pixels on the scan line of the present row turns to zero, which causes the organic electro-luminescence element on the scan line of the row to stop illuminating.